

ABSTRACT

An Optical Transport Network (OTN) (comprising a number of OTN nodes) uses an Internet Protocol (IP) based control plane (out-of-band signaling on a separate wavelength). Each OTN node of the IP-based control plane performs dual-feeding and 5 dual-selecting of signaling messages on diverse signaling paths. The IP-based control plane establishes a pair of physically disjoint signaling paths between every set of neighboring OTN nodes (pre-computed and pre-established physically disjoint primary and secondary message paths in the IP-based control plane).